

12.06.01 Photonics, Instrumentation, Optical and Biotechnical Systems and Technologies

Medical Devices, Systems and Products

The program is dedicated to theoretical and practical research training research of PhD students to contribute to research of physical phenomena and patterns in biomedicine, nuclear physics, nuclear technologies.

Key research and professional activities

development, design, production and application; mathematical, algorithmical, informational tools and software of

- high-tech hardware and software complexes for medical diagnostics and quality control systems for materials and products (including products of nuclear industry enterprises), expert systems and decision support systems, recognition systems.
- nuclear facilities, nuclear-physical and physical installations, systems and means to ensure their safe operation;
- control systems, control, technical diagnostics and automation of technical objects, including physical and nuclear power plants, including information-sensor, executive and control modules, software and hardware complexes of information-measuring systems, control and automation systems;

Practical training and job opportunities

- Russian research centers
- State Corporation ROSATOM companies
- Medical centers of the Federal Medical and Biological Agency
- Institutes of the Russian Academy of Sciences
- Blokhin National Medical Research Center of Oncology
- Evdokimov Moscow University of Medicine and Dentistry